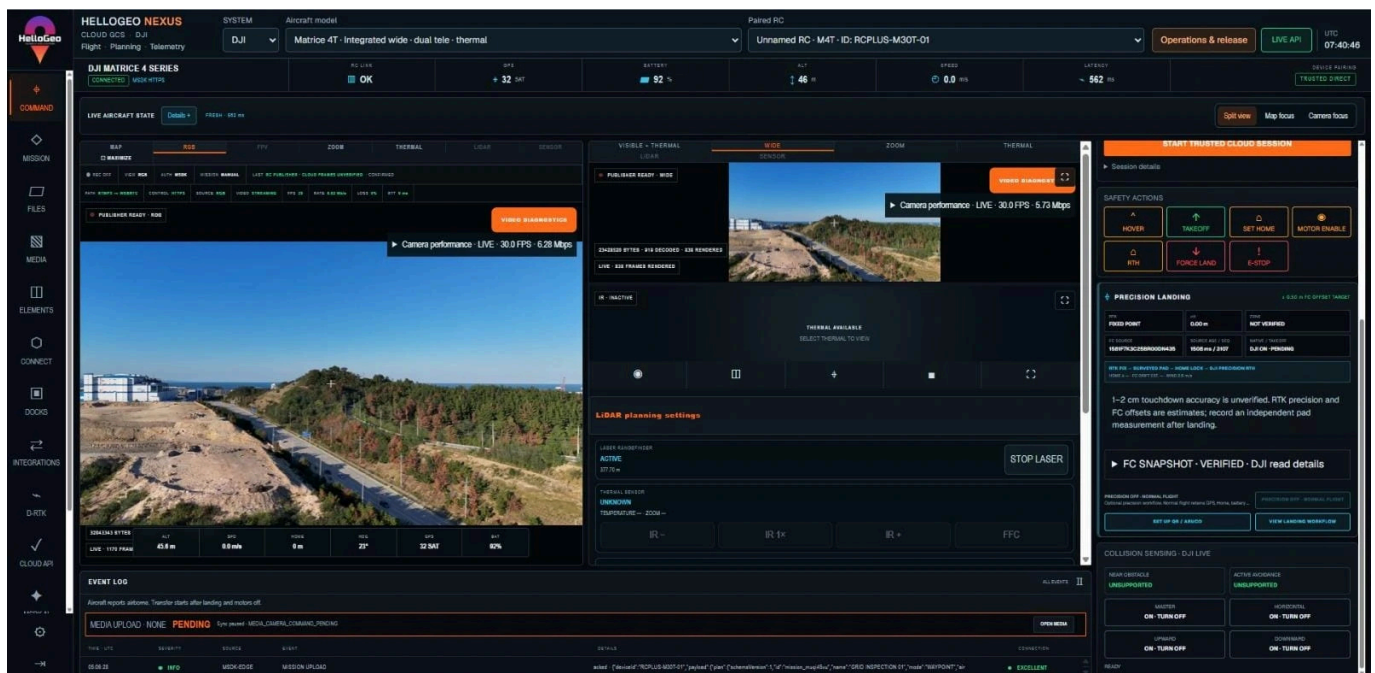


CONNECTED INTELLIGENCE

NEXUS

From the flight plan to the operational picture.

One workspace for structure routes, a revisioned mission library, aircraft context, telemetry and media. Plan, organise and review the work before, during and after a flight.



Recorded HelloGeo Nexus RGB workspace. Complete interface; telemetry reflects the captured session, not a live feed.

01

Plan with context

Review geometry, terrain, camera timing and aircraft profiles.

02

Operator control

Link supported controller workflows through VECTOR and pilot authority.

03

Save. Review. Reuse.

Keep mission revisions, independent saved copies and available RC receipts.

MISSION ENGINEERING

Plan the mission. Validate the context.

NEXUS brings route design and mission-specific checks into the same planning workspace.

01 Route & structure planning

Waypoints, area grids, circular orbits, single facade and four-sided building routes. Set the start angle, side or corner and direction. Review measured geometry in Site, Route and Preview views.

02 Terrain, camera & coverage

Review DEM/DSM terrain, datum, surveyed launch reference and route clearance. Use target GSD, camera footprint, overlap and heading for nadir or oblique coverage; inspect the route before handoff.

03 Mission library

Save, search, edit, load and reuse named missions. Keep revisions and independent saved copies with target-profile review. Export/import planning JSON; aircraft upload uses the appropriate vendor mission format.

04 Mission management

Review source revisions, copy status and available RC delivery receipts. Use checksum and preparation checks before handoff. Saved-copy counts are not flight counts; a start acknowledgement is not proof of completion.

05 Flight policy & sorties

Review battery-aware sorties and reserve budgets. Configure takeoff/RTH, yaw, gimbal, path, repeat/loop, finish and RC-loss policies. Keep KMZ/WPML workflows separate from portable library JSON.

06 Operational readiness

Check aircraft, height, camera, RTK, surveyed home reference and controller readback before each mission. Reuse preserves the original plan; it does not transfer flight permission or convert incompatible SDK formats.

Structure previews use entered measurements and illustrative textures; they are not a reality scan or obstacle check. Native flight execution still requires a compatible adapter, site clearance and validated launch, flight and return behaviour.

FLEET CATALOGUE

Aircraft context, by family.

Catalogue and UI coverage recorded in the October 2026 source brochure. Model selection is distinct from flight qualification.

9

DJI RC profiles

24

Autel profiles

DJI RC

Matrice 30 / 30T
Matrice 300 RTK / 350 RTK
Mavic 3 Enterprise / Thermal
Matrice 4E / 4T
Matrice 400

AUTEL ENTERPRISE

EVO Max 4T / 4N / 4T Pro
EVO Lite 6K / 640T Enterprise
Autel Alpha / Titan
EVO III / EVO III Enterprise

AUTEL EVO II V2

Pro V2 / Pro RTK V2 / Pro Enterprise V2
Dual 640T V2 / RTK V2 / Enterprise V2
8K V2

AUTEL EVO II V3

Pro V3 / Pro RTK V3 / Pro Enterprise V3
Dual 640T V3 / RTK V3 / Enterprise V3

SEPARATE CLOUD API AND VTOL WORKSPACES

Dock 2	Matrice 3D / 3TD
Dock 3	Matrice 4D / 4TD
Dock 4	Matrice 5TD + required O4 Ground Station
DragonFish	Standard / Pro

Dock 4 / Matrice 5TD uses dedicated Cloud API 2 configuration, commissioning/readiness, operation/recovery and extension workflows. O4 Ground Station and a licensed DJI base are required. Operational controls remain commissioning-gated.

Exact aircraft, controller, SDK, firmware and payload acceptance is required before operational use.

CONNECTED OPERATIONS

The mission is one part of the site.

NEXUS links mission context to people, controllers and geospatial evidence.

NEXUS + VECTOR + FLIGHT

NEXUS is the browser mission workspace. VECTOR carries separate DJI and Autel controller integration streams for aircraft identity, telemetry, payload control, mission handoff and media where the platform exposes them. HelloGeo FLIGHT is the published Android GCS segment for ArduPilot/PX4 via MAVLink.

COMMAND CENTER + AI VISION

Bring site observation into operational review. Documented AI Vision functions include drone object/crowd detection, PTZ entry/exit counting, intrusion, loitering and suspected-fall alerts. Dated evidence galleries, PDF reports and dataset/model workflows support human review.

ARTPOLE + DRONE STATION

Combine site observation with aircraft readiness and authorised inspection workflows. Station recovery, evidence transfer and site commissioning are deployment-specific. The operational sequence remains observation, operator review, approved mission and evidence review.

POINT + METASYNC + SUITE

Collect coordinate-linked GCPs and media, review field quality, organise Collections, and hand off survey outputs for geospatial work. MetaSync supports GNSS/RTK, NTRIP, map review and standard exports; features and formats vary by platform and build.

METaverse + CONNECT

Use spatial deliverables for immersive review and digital-twin experiences, and coordinate approved data exchange and operational handoffs. Define exchange formats, permissions, connector versions and acceptance criteria for each project.

CONNECTED MISSION LIBRARY

Owner-scoped cloud sync connects Nexus and VECTOR while the app is active. Offline saves remain pending; resolve conflicts explicitly. Reused plans require a fresh aircraft, height, camera and permission review.

Applications include infrastructure condition surveys, energy and industrial inspections, survey and mapping, port assets, disaster assessment and rescue support.

DEPLOYMENT AND PRODUCT REFERENCES

Start with the operation.

Scope the aircraft, site, data and people together. Agree acceptance criteria before commissioning.

1 Define the job

Asset types, inspection questions, survey method, deliverables, repeat frequency and operator roles.

2 Confirm the equipment

Aircraft, controller, payload, firmware and SDK/adaptor combination. Test the exact configuration.

3 Prepare the site

Maps, terrain, reference coordinates, flight policies, connectivity, station readiness and permitted operating area.

4 Accept the workflow

Demonstrate saved-plan reuse, revision checks, route handoff, telemetry, payload functions, media and recovery. Review delivery receipts alongside the actual flight evidence.

QUALIFICATION BOUNDARIES

Dock 4 / Matrice 5TD requires O4 Ground Station and a licensed DJI base. Configuration and operational adapters are implemented; live controls and hardware acceptance remain commissioning-gated. Saved plans and receipts do not certify flight completion or aircraft compatibility.

SOURCE BASIS

1. Current HelloGeo Nexus product source, reviewed 17 October 2026: structure planner and preview, mission library, saved-copy history, portable planning files and Cloud API 2 workflows.
2. HelloGeo Mission Library operator guide and reuse audit, October 2026. Planning JSON is a library interchange format; vendor mission files and controller qualification remain separate.
3. HelloGeo NEXUS Ecosystem Brochure and One-Page Overview, October 2026. Fleet profile inventory and recorded product artwork are catalogue context, not evidence of every hardware combination.
4. HelloGeo Point V1 + MetaSync product and technical documentation, August-September 2026. Connected platform capabilities depend on the selected build and deployment.

Discuss your deployment sales@hellogeo.world